

wherein WYBAZCX is composed of amino acid sequences that include one or more sequences shown in FIGS. 1 through 15 (which includes SEQ ID NOS:2, 4, 5, 8, 9, 12, 14, 15, 18, 19, 22, 23, 26, 27, 30, 33, 35, 38, 39, 41, 44, 45 and 48), wherein W comprises the polypeptide segment F, or is absent; wherein Y comprises the polypeptide segment E, or is absent; wherein Z comprises the polypeptide segment G or is absent; and wherein X comprise a polypeptide segment selected from the group consisting of C/D HKL, C/D H, C/D HL, C/D D, C/D' HL, C/D' HKL, C/D' H, C/D' D, C/D C/D' HKL, C/D C/D' H, C/D C/D' HL, C/D C/D' D, C/d D'H, C/D D' HL, C/D D' HKL, C/D' D' H, C/D' D' HL, C/D' D' HKL, C/D C/D' D' H, C/D C/D' D' HL and C/D C/D' D' HKL, and preferably that either

- a) at least one of F, Y, B, A, Z, C or X is of bovine origin; or
- b) Y comprises the polypeptide segment E; or
- c) X comprises the polypeptide segments C/D HKL, C/D D, C/D' HKL, C/D C/D' HKL, C/D C/D' D, C/D D' H, C/D D' HL, C/D D' HKL, C/D' D' H, C/D' D' HKL, C/D C/D' D'H, C/D C/D' D HL, C/D C/D' D' HKL, C/D'H, C/D C/D' H or C/D C/D' HL.

10. (Once Amended) The method of [claim 7] claims 1, 2, 3, or 4, wherein the neuregulin or fragment or derivative thereof comprises FBA polypeptide segments, FEBA polypeptides segments, EBA polypeptide segments, EBA' polypeptide segments or FEBA' polypeptide segments.

11. (Once Amended) The method of [claim 7] claims 1, 2, 3, or 4, wherein the

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Concluded
neuregulin is encoded by a nucleic acid that [comprises one of] is selected from the group consisting of SEQ ID NOS: 49, 51 and 53.

22. (Once Amended) The method of [claim 7] claims 1, 2, 3, or 4, wherein the neuregulin or fragment or derivative comprises a sequence that is shown in Figures 7, 8 or 9.

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23. (Once Amended) [A] The method of any one of claims [1-6] 1-4, wherein a nucleic acid encoding a neuregulin or a fragment or derivative thereof is administered to the mammal.

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27. (Once Amended) The method of [claim 25] claims 1, 2, 3, or 4, wherein the neuregulin or neuregulin fragment or derivative comprises FBA polypeptide segments, FEBA polypeptides segments, EBA polypeptide segments, EBA' polypeptide segments or FEBA' polypeptide segments.

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35. (Once Amended) [A] The method of any one of claims [1-34] 1-4, wherein the administered neuregulin or fragment or derivative[, or the administered nucleic acid encodes a neuregulin fragment or derivative] exhibits at least about a 10% reduction in infarct volume in an *in vivo* cerebral ischemia assay.